A RARE CASE OF ADULT CHRONIC INTUSSUSCEPTION

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Abstract
Chronic intussusception is the prolapse of a portion of bowel into the lumen of an adjacent segment of the bowel usually lasting 14 days or more. We report on a 65-year-old man who presented with a fifteen month history of generalized cramping lower abdominal pain without any change in bowel habits. Plain abdominal x-ray, ultrasonography and CT were performed. Laparotomy revealed an ileo-ileal intussusception; there was no cause identified and the intussusception was easily reproducible peroperatively. The intussusception was reduced and the small intestine was plicated.

Keywords: Adult intussusception, chronic abdominal pain, placation of bowel

Introduction
Intussusception is a leading cause of intestinal obstruction in children but not so in adults.1 Intussusception accounts for less than 5% of intestinal obstruction in adults.2 Reviews point to the existence of an underlying pathological cause in 70%–90% of cases3. These are mainly polyps and colonic malignancies.4 One point is widely accepted, i.e., that treatment is always surgical.5

Case report
A 65-year-old patient presented to us with a fifteen month history of generalized abdominal pain. The pain was colicky in nature. The abdominal pain had no association with meals and his bowel habits were normal. He did not have any urinary symptoms.

On examination, he was a lean person with a BMI of 18kgm⁻². Cardiovascular, respiratory, nervous system and abdominal examinations were normal.

He had been investigated for abdominal pain for a period of 2 months. Full blood count, erythrocyte sedimentation rate, liver functions and renal functions were normal. He had undergone upper GI endoscopy and colonoscopy and both were normal. Ultrasound scan abdomen revealed a bowel mass in the left hypochondrial region which was persistent in the repeat US scans. Small bowel enema did not show any evidence of intussusception. Thus the patient underwent a triple phase contrast enhanced CT abdomen. The conclusion was chronic intussusceptions in the jejunum possibly secondary to a mass.
As the patient was symptomatic, a decision was made to perform a diagnostic laparotomy. Though it would have been ideal to perform a diagnostic laparoscopy, there was no free access to laparoscopy at time of surgery so it was not an option for this patient. Surgery revealed a long segment of ileo-ileal intussusception in the left lower abdomen. There were no masses, or polyps felt within the segment of the bowel affected. Enteroscopy was not available in the theatre where the operation was conducted, and peroperative enterotomy was not opted for as no masses were felt, and because flat or non palpable lesions are unlikely to cause intussusception. Opening in to the bowel would also have added to the morbidity and risk of complications, such as intestinal content leak. The duodeno-jejunal flexure was found to be to the right of the spine, but the superior mesenteric vessels were located to the right of the DJ flexure, and the caecum was in the right iliac fossa. There was no malrotation of small intestine. There were few loose adhesions at the site of DJ flexure. The intussusception was reduced and the mesentery of the small intestine was plicated to reduce the risk of recurrence of intussusception.

Discussion

Diagnosis and the management of chronic intussusception is usually delayed due to the atypical clinical presentations and because of the lack of suspicion. Incidence is very low compared with the paediatric population and is around 2-3 cases per 100000. The clinical presentation is usually a vague abdominal pain which does not correlate with any specific illness, and the diagnosis relies on imaging modalities.

The classic features of intussusception in ultrasonography, such as target sign and pseudo kidney sign, are seen in adults as well. However ultrasonography relies on the expertise of the operator and these signs may be obscured by obesity and gas in bowel. Preoperative diagnosis of intussusceptions is based on ultrasonography and computed tomography (CT) and the latter method is the most effective and useful preoperative diagnostic method. However, most of the cases are diagnosed during emergency laparotomy.

Surgical intervention is always needed in adults and older children because of the high incidence of underlying lesions in them. Surgery involves resection of the involved segment especially if the colon is involved.

Laparoscopy is increasingly becoming popular and in this condition, and it is advantageous in patients where the diagnosis is in doubt, as it can be used as for diagnostic purpose as well. The required length of incision can also be reduced as abdominal survey of the entire bowel can be done with the laparoscopy, and the affected part can be delivered through a smaller incision. However, the absence of tactile sensation in laparoscopy may hinder the detection of smaller intussusceptions, as well as detection of any underlying lesion which may cause the intussusception. On table enteroscopy may be challenging technically during laparoscopy. Nevertheless, many case reports describe having performed laparotomy for their patients, indicating that even in this modern era, open surgery is the main stay in the treatment of adult intussusception.
Enteroscopy may occasionally have a place in treatment, for instance when ulcers are the lead point of the intussusception. These ulcers may be non palpable on surgery and this may be missed during surgery.

With regard to the technical aspects of treatment during surgery for small bowel intussusception, if the affected segment of bowel is viable and there is no evidence of a causative lesion, reduction alone is sufficient. This was the finding in our case; we performed a simple reduction only and this fact is supported by several studies. The aetiology is a malignancy in most of the cases of large bowel intussusception as opposed to small bowel intussusception. When a malignancy is detected, a formal resection accepted for that malignancy should be undertaken wherever possible.

**Conflict of interest statement**

The authors declare that this study was conducted in the absence of any commercial or financial relationships that could be construed as a potential conflict of interest.

**References**


**Figure 2:** CT scan shows the characteristic target sign

